

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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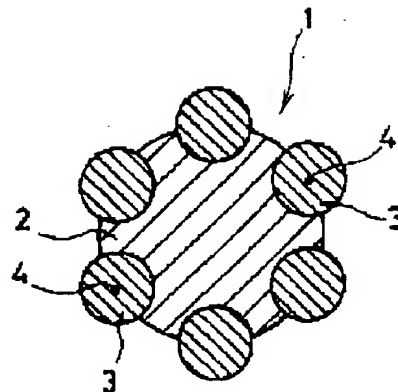
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APPLICANT : UNITIKA LTD;

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TITLE : BIODEGRADABLE CONTINUOUS  
FILAMENT NONWOVEN FABRIC AND  
ITS PRODUCTION



ABSTRACT : PROBLEM TO BE SOLVED: To produce a biodegradable continuous filament nonwoven fabric having an excellent mechanical strength and excellent softness and further controllable biodegradability and to provide a method for production thereof.

SOLUTION: This biodegradable continuous filament nonwoven fabric is produced by respectively separately melting a polyalkylene alkanoate and a polylactic acid-based polymer and melt spinning the resultant melt through a multilobed type conjugated spinning spinneret capable of forming a core part 2 of the polyalkylene alkanoate, forming plural protruding parts 3 independent in the circumferential direction of the core part 2 of the polylactic acid-based polymer in the fiber cross section and forming the core part 2 and the protruding parts 3 so as to make the core part 2 continuous without being divided into sections by the protruding parts 3 and further make both the core part 2 and the protruding parts 3 continuous in the fiber axial direction to be alternately exposed on the fiber surface, cooling the extruded yarn extruded from the spinneret, drawing and attenuating the yarn at  $\geq 2,000$  m/min drawing speed, opening the yarn, depositing the resultant continuous filaments, forming a nonwoven web, carrying out the thermocompression of the formed nonwoven web and forming the nonwoven fabric.

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